

## SUPPLEMENTARY INFORMATION

### **Multifunctional platinum@BSA-rapamycin nanocarriers for the combinatorial therapy of Cerebral Cavernous Malformation**

Elisa De Luca<sup>a</sup>, Deborah Pedone<sup>a,b</sup>, Mauro Moglianetti<sup>a</sup>, Daniele Pulcini<sup>a</sup>, Andrea Perrelli<sup>c,d</sup>, Saverio Francesco Retta<sup>c,d\*</sup> and Pier Paolo Pompa<sup>a,e,\*</sup>

<sup>a</sup> Istituto Italiano di Tecnologia, *Nanobiointeractions&Nanodiagnostics*, Center for Biomolecular Nanotechnologies, Via Barsanti 14, 73010, Arnesano (Lecce) Italy.

<sup>b</sup> University of Salento, Department of Engineering for Innovation, Via per Monteroni, 73100, Lecce, Italy

<sup>c</sup> University of Torino, Department of Clinical and Biological Sciences, 10043, Orbassano (Torino), Italy.

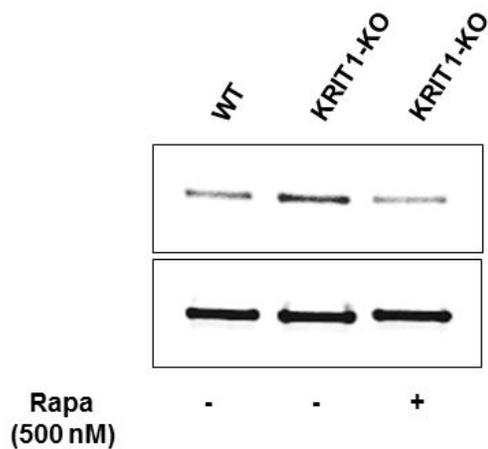
<sup>d</sup> CCM Italia research network ([www.ccmitalia.unito.it](http://www.ccmitalia.unito.it))

<sup>e</sup> Istituto Italiano di Tecnologia, *Nanobiointeractions&Nanodiagnostics*, Via Morego 30, 16163, Genova, Italy

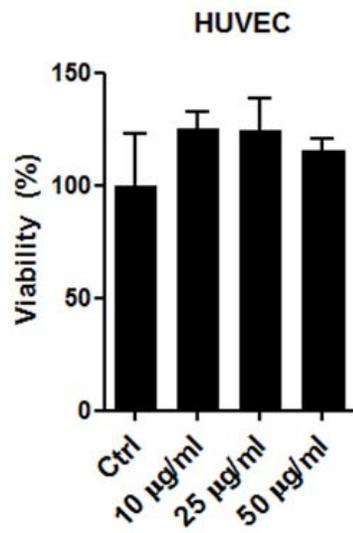
\* Corresponding authors: [pierpaolo.pompa@iit.it](mailto:pierpaolo.pompa@iit.it); [francesco.retta@unito.it](mailto:francesco.retta@unito.it)

	Intensity (nm)	Volume (nm)
Pt5	13±5	9±3
Pt5@Rapa	45±18	30±11

**Table S1.** Hydrodynamic diameter calculated for intensity distribution and volume distribution, measured by DLS, of Pt5 and Pt5@Rapa NPs.



**Figure S1.** Treatment of KRIT1-KO MEFs with 500 nM rapamycin restores p62 expression to the levels of wild-type MEFs.



**Figure S2.** Cytocompatibility of Pt5 NPs on HUVECs.